Amendments to the Claims

1. (*Currently Amended*) An electric device ~~(100)~~ with a body ~~(102)~~ having a resistor ~~(107)~~ comprising

a phase change material being changeable between a first phase and a second phase, the resistor ~~(107)~~ having a first electrical resistance when the phase change material is in the first phase, and

a second electrical resistance, different from the first electrical resistance, when the phase change material is in the second phase, the phase change material constituting

a conductive path between a first contact area and a second contact area, a cross-section of the conductive path being smaller than the first contact area and the second contact area.

2. (*Currently Amended*) An electric device ~~(100)~~ as claimed in Claim 1, wherein a part of the conductive path having said cross-section constitutes a volume of phase change material, the volume having an electrical resistance which is larger than an electrical contact resistance at the first contact area ~~and/or~~ or at the second contact area, independent of whether the phase change material is in the first phase or the second phase.

3. (*Currently Amended*) An electric device ~~(100)~~ as claimed in Claim 1, further comprising a heating element ~~(106)~~ able to conduct an electric current for enabling a transition from the first phase to the second phase.

4. (*Currently Amended*) An electric device ~~(100)~~ as claimed in Claim 3, wherein the heating element ~~(106)~~ is arranged in parallel with the resistor ~~(107)~~.

5. (*Currently Amended*) An electric device ~~(100)~~ as claimed in Claim 4, wherein the heating element ~~(106)~~ has a heating elements electrical resistance which is smaller than the first electrical resistance and the second electrical resistance.

6. (*Currently Amended*) An electric device ~~(100)~~ as claimed in Claim 5, wherein the heating elements electrical resistance is larger than 0.3 times the minimum of the first electrical resistance and the second electrical resistance.

7. (*Currently Amended*) An electric device ~~(100)~~ as claimed in Claim 3, wherein the heating element ~~(106)~~ is in direct contact with the resistor ~~(107)~~.

8. (*Currently Amended*) An electric device ~~(100)~~ as claimed in Claim 1, wherein the resistor ~~(107)~~ constitutes a memory element ~~(170)~~, and the body ~~(102)~~ comprises:
[[-]] an array of memory cells, each memory cell comprising a respective memory element ~~(170)~~ and a respective selection device ~~(171)~~, and
[[-]] a grid of selection lines ~~(120, 121)~~, each memory cell being individually accessible via the respective selection lines ~~(120, 121)~~ connected to the respective selection device ~~(171)~~.

9. (*Currently Amended*) An electric device ~~(100)~~ as claimed in Claim 8, wherein:
[[-]] the selection device ~~(171)~~ comprises a metal oxide semiconductor field effect transistor having a source region ~~(172)~~, a drain region ~~(173)~~ and a gate region ~~(174)~~, and
[[-]] the grid of selection lines ~~(120, 121)~~ comprises N first selection lines ~~(120)~~, M second selection lines ~~(121)~~, and an output line,

the resistor ~~(107)~~ of each memory element ~~(170)~~ electrically connecting a first region selected from the source region ~~(172)~~ and the drain region ~~(173)~~ of the corresponding metal oxide semiconductor field effect transistor to the output line, a second region of the corresponding metal oxide semiconductor field effect transistor selected from the source region ~~(172)~~ and the drain region ~~(173)~~ and being free from contact with the first region, being electrically connected to one of the N first selection lines ~~(120)~~, the gate region ~~(174)~~ being electrically connected to one of the M second selection lines ~~(121)~~.

10. (*Currently Amended*) Method of manufacturing an electric device ~~(100)~~ as claimed in Claim 1, comprising the steps of:

[[-]] providing a main surface of a pre-fabricated electric device ~~(100)~~ with a layer (107) of the phase change material, and

[[-]] reducing a cross-section of a conductive path in the layer ~~(107)~~ between a first contact area and a second contact area, the cross-section being smaller than the first contact area and the second contact area.

11. (*Original*) A method as claimed in Claim 10, wherein the main surface has a step profile and the step of reducing the cross-section comprises an anisotropic etching step for forming a sidewall spacer along at least a part of the step profile.

12. (*Currently Amended*) A method as claimed in Claim 10, wherein a part of the conductive path having said cross-section constitutes a volume of phase change material, and the step of reducing the cross-section comprises the sub-steps of:

[[-]] providing a resist layer sensitive to electrons,

[[-]] writing a pattern with an electron beam into the resist layer, the pattern defining at least the volume of the phase change material, and

[[-]] developing the resist.